

REMARKS

In the Official Action mailed on **October 27, 2003**, the Examiner examined claims 1-36. Claims 1-36 were rejected under 35 U.S.C. §102(e) as being anticipated by Lippincott et al. (USPN 6,574,784, hereinafter "Lippincott") or Liebmann et al. (USPub 2002/0091985 A1, hereinafter "Liebmann").

Rejections under 35 U.S.C. §102(e)

Independent claims 1, 12, 23, 34, 35, and 36 were rejected as being anticipated by Lippincott or Liebmann. Applicant respectfully points out that Lippincott teaches biasing a segment by a **fixed amount** based upon the output of an algorithm or upon a table entry (see Lippincott, FIGs. 4 and 5 and the associated text). Applicant also respectfully points out that Liebmann teaches determining **focus and dose distributions** for optical proximity correction and assist feature rules (see Liebmann, Abstract).

In contrast, the present invention is directed to a method, mask, method of using the mask, and a means for **calculating an available bias** based on minimum spacing requirements and/or minimum width requirements and **allocating the available bias** based on relative weights assigned to the target edge and the second edge (see FIG.8, page 12, line 3 to page 13, line 20, and claims 10, 21, and 32 of the instant application).

The present invention differs from the teachings of Lippincott because the system of Lippincott compares the spacing between the edge segment and the nearest neighboring structure to a reference value (see Lippincott, col. 3, lines 62-66). Unlike the present invention, Lippincott does not calculate an available bias based on minimum spacing requirements and/or minimum width requirements, and does not allocate the available bias based on relative weights assigned to the target edge and the second edge. Note that by allocating available bias in this way, the present invention is able to balance available biases between

different edges (note the EXAMPLES section starting on page 10 of the instant application). The system of Liebmann does not teach biasing edges but only determining focus and dose distributions and determining assist feature rules (see Liebmann, Abstract).


Accordingly, Applicant has amended independent claims 1, 12, 23, 34, 35, and 36 to include the limitations of calculating the available bias based on minimum spacing requirements and/or minimum width requirements and the limitations from dependent claims 10, 21, and 32 to clarify that the present invention applies the bias by calculating the available bias based on minimum spacing requirements and/or minimum width requirements and allocating the available bias based on relative weights assigned to the target edge and the second edge. Dependent claims 10, 21, and 32 have been canceled without prejudice.

Hence, Applicant respectfully submits that independent claims 1, 12, 23, 34, 35, and 36 as presently amended are in condition for allowance. Applicant also submits that claims 2-9 and 11, which depend upon claim 1, claims 13-20 and 22, which depend upon claim 12, and claims 24-31 and 33, which depend upon claim 23 are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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Date: January 23, 2004

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